# Music Preferences and their Relationship to

Behaviors, Beliefs, and Attitudes toward Aggression

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#### **ABSTRACT**

The content of violence within media has significantly increased over the years and has been approached using a diverse empirical research representation. Within these empirical attempts, the area of music violence has only been approached through the utilization of randomized experiments and thereby presses the need to explore the alternative empirical methodologies. In the present study, musical preference among undergraduate and adolescents was explored in its relation to behaviors, attitudes, and beliefs toward aggression. Participants were required to respond to a music preference questionnaire and the Music Violence Assessment (MVA) and the Normative Beliefs about Aggression Measure (NOBAG). Results suggest that there are strong relationships between music preference and attitudes, behaviors, and acceptance of aggression. Results also indicate that there are significant differences between the endorsement of aggression by adolescents and undergraduates.

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For over sixty years the issue of media violence has permeated its way into American political and societal interest (Anderson et al., 2003). One the most salient topic with respect to media violence is its impact on the beliefs, attitudes and behaviors of our youth. Numerous types of research have been conducted and still are being conducted to better understand the role media violence plays in regards to the socialization processes of youth and how these processes are possibly becoming distorted. Media violence has been shown to increase both aggressive behavior and thoughts in not only children but also adults (Anderson et al.). As the number of media outlets increase and broaden in their mediums it is important to view media not only in terms of entertainment, but to also attempt to define and identify any possible adverse implications that can be indirectly or directly related to it.

In the past five decades both government and medical organizations have reported findings illustrating the strong relationship between viewing violent television and aggressive behavior (Anderson et al., 2003). Most recently, six medical and public health professional organizations held a Congressional Public Health Summit on July 26, 2000 and issued a Joint statement on the Impact of Entertainment Violence on Children (Federal Trade Commission, 2000). The report concluded that entertainment violence can lead to aggressive behavior and there is overwhelming evidence to support a causal relationship between media violence and aggressive behavior in some children (Federal Trade Commission). It is important to understand that although there has been significant evidence shown in support of media violence and aggression it still has not been widely accepted as credible or relevant.

Within the spectrum of media violence it is essential to comment on the role of violent musical lyrics and videos and their possible influences on individuals. Empirical research has linked violent music to increase aggressiveness in its consumers not only pertaining to physical violence but also attitudes and beliefs relating to aggression and perceptions of women (Anderson et al., 2003). Similarly to the accessibility of violent television, violent music and videos are easily attained by consumers and have been widely accepted as appropriate forms of entertainment. The profitability of the music industry has been on a steady incline for the past decades and its influence has saturated the environment of individuals.

In regards to media violence it is important to distinguish between the different types of aggression that are measured and develop working definitions in order for clarification.

Bushman and Anderson (2001) have defined aggression as any behavior that is directed towards another individual with the immediate intent to harm and that the individual whom is the target is trying to avoid it. In addition, verbal aggression is related to saying hurtful comments and indirect aggression refers to aggression utilized in order to hurt another person, but is done so outside the person's awareness (Anderson et al., 2003). Physical aggression may range in terms of severity pertaining to less serious acts and evolving into more serious acts which carry a significant risk of injuring another person (Anderson et al.). Lastly, aggressive thoughts and emotions refer to the attitudes, beliefs and reactions that promote aggression and are related to aggressive behavior (Anderson et al.).

Furthermore, it is important to consider the relationship between media violence and aggression and the issue of causality. Although media violence is a strong predictor of aggression, it alone cannot be held solely responsible for adverse behavior. Instead media violence should be viewed as one of the many potential factors that are utilized in order to shape

aggressive behavior (Anderson et al., 2003). Moreover, when considering empirical research it is important to understand that small statistical effects can have larger societal consequences.

Anderson et al. (2003) identified three reasons that make it sensible to acknowledge small statistical effects in regards to media violence. The first reason pertains to the issue of population and the fact that although a statistic might be undersized it still affects a large portion of the population. The second reason is related to the deleterious effect of media violence and how it will accumulate throughout the population due to learning. Finally the third reason pertains to the short lived effects of a single exposure and how these effects can add significantly to the amounts of violence and aggression in society because at any given time a large portion of the population is currently being exposed or has been exposed to violent media (Anderson et al.). Consequently it should be cautioned about making conclusions regarding statistic effect size without placing it into a broader population based context.

#### **Literature Review**

## Content of Musical Violence

Smith and Boyson (2000) examined the prevalence and context of physical aggression in music videos. They sampled over 236 hours of videos and examined 1,962 music videos to develop a composite week. Smith and Boyson utilized MTV, BET and VHI in order to develop their sample size. They found within MTV, BET and VH1 that a full 80% of their videos featured a single violent interaction, 17% featured 2 and 3% contained 3 or more. In addition they found that just under one third of violent interactions in music videos involved lethal violence that would result in serious physical harm in the real world. Also, Smith and Boyson found that within the music video genre, rap videos and heavy metal videos were significantly

more likely to feature violence than were rock, R&B, adult contemporary and other miscellaneous videos.

The study also found that 88% all violent music videos were presented in authentic or realistic context and that 12% of violent scenes contained humor. A full 79% of violent scenes featured no punishments and 17% of all violent videos featured the violence as being rewarded or positively reinforced. Additionally, close to three fourths of bad characters in the music videos were shown as never or rarely punished. Therefore it can be concluded that music videos do contain a high number of violent scenes and the violent scenes, which are featured, add contextual features to the programming and make it more attractive to the consumer.

Overview of Empirical Research: Music

Music videos and music lyrics contribute to the spectrum of media violence. Empirical studies pertaining to music have received less attention than in comparison with the work that has been completed in regards to television and movies. In addition, the amount of research has been limited to randomized experiments, and various correlational studies. Furthermore, research has not been explored in regards to possible cross-sectional influences between age and gender. Below are certain studies that have been conducted in order to illustrate the relationship between violent music and music videos with aggressive beliefs and attitudes.

Randomized experiments: Examples

Several studies have examined how music videos and lyrics affect an individual's aggressive attitudes and beliefs. Recently Anderson, Carnagey, and Eubanks (2003) examined the effects of violent lyrics on aggressive thoughts and hostile feelings. The randomized experiment utilized five experiments designed in order to avoid certain problems pertaining to directness and music genre encountered in previous work. Furthermore the study provided seven

violent songs by seven artists and eight nonviolent songs by seven artists in order to make certain that results were not skewed due to one or two specific songs or artists. The consistent results from these experiments provide strong evidence that songs with violent lyrics increase aggression-related cognition (r= .21) and affect (r= .27).

Johnson, Adams, Ashburn, and Reed (1995) studied the effects of music videos, which depicted images of sexually subordinate women on the acceptance of teen dating violence. African Americans were randomly assigned to either a nonviolent rap music video, which contained the aforementioned images, or a no-music video control condition. Results showed that young women demonstrated more accepting attitudes towards teen dating violence after being exposed to the video, which contained the sexual images. In another related study, Johnson, Jackson, and Gatto (1995) studied the effects of exposure to rap music on the attitudes and perceptions of young African American males. Results indicated that exposure to violent rap music videos increased the acceptance of violent behavior in response to a hypothetical conflict situation. Furthermore, Hansen and Hansen (1990) found that when college students were shown rock music videos with antisocial themes they reported a greater approval of antisocial behavior opposed to students who had not been shown antisocial videos.

In another experiment, Barongan and Hall (1995) found that misogynous music facilitates sexually aggressive behavior and also produces cognitive distortions relating to sexual aggression. Lastly, Wester, Crown, Quatman, and Heesacker (1997) studied the effects of violent songs without video on aggression-related variables. The study found that participants exposed to violent lyrics viewed their relationships with women as more adversarial although there were no significant differences in negative attitudes toward women among four different lyric conditions.

Running head: Music Preference

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Cross sectional surveys: Examples

As mentioned earlier, there are no published cross-sectional studies pertaining to the effects of exposure to violent music on aggressive behavior, and beliefs. However there have been several studies that have illustrated a connection between behaviors and attitudes between the kinds of music that individuals listen to. Took and Weiss (1994) found that adolescents who preferred heavy metal and rap music had a higher incidence of below-average school grades, school behavior problems, sexual activity, drug and alcohol use, and arrests. Similarly, Rubin, West, and Mitchell (2001) found that college students identified as heavy metal or rap listeners reported higher levels of antisocial behavior as opposed to other genres of music. Specifically, rap listeners showed more aggression and distrust, whereas heavy metal listeners exhibited more aggression and lesser regard for women.

Summary of studies of exposure to music videos and lyrics

Experimental studies provide considerable evidence pertaining to the effects of violent music videos on viewer's beliefs and attitudes. Additionally, the initial insight offered by studies that attempt to identify connections between violent music videos and maladaptive cognitions has proved to be valuable. However, in order to better understand the impact of musical preference on beliefs toward aggression there needs to be more work done that utilizes a more comprehensive cross-sectional methodology, which looks at the effects of music on beliefs, attitudes, and behaviors. Furthermore, cross-sectional studies should be implemented within the area of empirical research in order to identify any developmental trends that pertain to the acquisition of maladaptive thoughts and beliefs.

### **Theoretical Implications**

*Observational Learning and Social Cognitive Theory* 

Bandura suggested that individuals first acquire behaviors through the observation of social interactions and that the influential power of such learning occurs throughout childhood and maturity (Anderson et al., 2003). Additionally, Bandura posited that the likelihood that an individual will acquire a new behavior is dramatically increased when the context of behavior is realistic, the viewer identifies with the model, rewarding consequences follows the behavior and the model is similar or attractive to the viewer (Bandura, 1977).

For example, Bandura, Ross and Ross (1963) showed that when children were shown an aggressive model, which was rewarded, the children were more likely to imitate the actions and behaviors of the model oppose to imitative behaviors of children shown an aggressive model that was punished. In regards to observational learning and its implications in regards to media violence it is reasonable to infer that individuals who observe aggressive and violent acts are more prone to imitate and internalize such behaviors (Bandura, 2001).

Subsequent to his work on social learning Bandura (2001) created a more complex model for explaining the psychological mechanisms in regards to media violence and tried to account for not only behavioral processes but also an integration of cognitive mechanisms as well. Social cognitive theory provided a framework in order to explain the relationship between individual and society. Bandura viewed society as an arena that affects individuals and is in turn affected by them and that society, personal factors in the form of cognitive, affective and behavioral patterns are all interacting determinants (Bandura).

These determinants all influence one another and are products of each other. Bandura (2001) suggested that people are self-organizing, proactive, self-reflective and self-regulated and therefore human development is embedded in the vast social system. In other words, the changes and adaptations that individuals make are influenced and influence the entire social

support system, also known as reciprocal determinism. Bandura identified several processes and capabilities that individuals adhere to in regards to media violence. These items are the social construction of reality, vicarious capability, abstract modeling, self-regulatory and self-reflective capabilities (Bandura).

The social construction of reality influences the way individuals interpret and validate their use of media violence. Within the construction, media is perceived as a reflection of social reality and portrays ideological representations of human nature, social relations and the norms and structures of society (Bandura, 2001). Individuals use this construct of reality to validate their behaviors and thoughts through vicarious reinforcement. Meaning that individuals view this mediated reality as a genuine representation of how their society operates. Heavy and prolonged exposure to this mediated world may eventually make the media presented images appear to be the authentic state of affairs (Bandura). Consequently, as individuals consume violent media their ideas and behaviors are being shaped through reciprocal determinism in the mediated environment.

Bandura (2001) proposed that individuals have the ability to learn vicariously through the conveyance of models and symbols. People give meaning and form to symbols and models in order for one to gain understanding of these images through observations. These models serve as a function for learning in order for individuals to experience a vast amount of situations and outcomes without having to invest the time. Therefore a single televised character or music video can transmit new ways of thinking and behaviors to countless number of individuals in different areas simultaneously. This transmission of information may interfere with an individual's perceptions regarding people and social situations due to their lack of social support systems. The majority of children and individuals are limited to their physical and social

surroundings and therefore reach to outside sources in order for to attain awareness of different people, places and behavior.

Through vicarious learning individuals are able to develop attitudes towards situations and individuals through the observation of a model and their experience with items that are not known to them. As a result individuals whom regularly view violent programming are adopting distorted and dangerous ways of behaving in situations and dealing with people. In addition to violent television and music, individuals may also be adopting and perpetuating harmful stereotypes in regards to race, gender and sexual orientation.

The utilization of abstract modeling is closely associated with the capability to vicariously learn through the actions of others. In abstract modeling, individuals extract the rules governing specific actions taken by televised characters or music videos and adopt them as their own (Bandura, 2001). Meaning that the children observe a model using or incorporating rules in order to justify or control their actions and the individual extracts what they see. As the individual extracts the information they integrate it into their own perceptions of rules and behaviors. The person then utilizes the newly formed rules to produce new instances of behavior and refer to the extracted information as an underlying core. Through the use of abstract modeling the person acquires standards for judging events and standards for regulating their motivations and conduct (Bandura). Therefore if individuals are adopting rules governing violent behavior they may be incorporating distorted evaluations of their behavior.

The self-regulatory and reflective capabilities refer to the individual's ability to form internal thoughts and external behaviors with outside standards. Through the self-regulatory capability the child is able to motivate and guide their actions through reducing the discrepancy between their actions and thoughts with the adopted standards (Bandura, 2001). Therefore when

individuals are evaluating their thoughts and behaviors through vicarious learning with violent television characters they are adopting aggressive guides in order to compare future thoughts.

In utilizing a self-reflective capability individuals are able to reflect on their self and the adequacy of their thoughts (Bandura, 2001). Children will judge the results of their thinking and behaving by comparing how well they mirror some marker of reality. In a social construct of violent reality the person will be comparing their thoughts and behaviors with ones of aggression and violence. Therefore if the individual is displaying patterns of aggression continuing to view this type of programming in order to verify and validate their behavior will positively reinforce them.

#### **Statement of the Problem**

The area of media violence has been well documented and studied, however the connection between music preferences and behaviors, attitudes and beliefs in association with violence has not been established. In addition, the possible link between the consumption of violent music, attitudes toward violent music and the acceptance of aggression has not been studied. The present study will attempt to identify the relationship between music preference and behaviors, beliefs, and attitudes with respect to aggression. Moreover, the present study will attempt to identify the possible differences between not only young adults and adolescents, but also between males and female's beliefs, behaviors, and attitudes with respect to violent music.

### **Research Questions**

In respect to these areas of potential research the present study attempts to identify the possible relationships between music preferences and behaviors, attitudes and beliefs in association with violence. The present study, in accordance with empirical findings, predicts that certain musical genres such as Rap, Rock, and RB will be related to less negative views toward

violence and more consumption of violent music. Whereas other musical genres including, Christian, dance, country and adult will illustrate a negative relationship to violent attitudes and behaviors. The present study also predicts that Rap, rock, and RB will be related to more accepting beliefs about aggression, whereas Christian, Dance, Country, and Adult will not. Lastly, the present study hypothesizes that there will be noticeable differences between group characteristics such as age and sex. Specifically, the present study predicts that younger individuals will more prone to aggression and females will be less accepting of aggression.

#### Method

#### **Participants**

Participants for the study included middle school students from a South Texas Independent School District and undergraduate students at a South Texas University. With respect to adolescent participants, permission was obtained from the Corpus Christi Independent School district prior to the collection of middle school participant data. Participants under the age of 18 were required to complete a student assent form in addition to a parental consent letter and parental/guardian consent form. The sample consisted of male (n=41) and female (n=55) adolescents that were randomly selected from the sixth, seventh, and eighth grade and ages ranged from 11 to 15 years of age with the median age being 13. Participant's ethnicity varied among adolescent participants with 88.5% reporting Hispanic, 5.2% reporting Caucasian, and 6.3% reporting other.

With respect to the undergraduate student sample, participants over the age of 18 were asked to sign an informed consent form prior to participation. The sample consisted of male (n=31) and female (n=81) undergraduate participants selected by convenience from freshman type seminar level courses, which represented varying undergraduate majors of study.

Participant's ages ranged from 18 to 40 years of age with the median age being 19. Participant's ethnicity varied among undergraduate participants with 48.2% reporting Caucasian, 45.5% reporting Hispanic, and 6.3% reporting other. Undergraduate participants additionally received extra credit for participation.

#### Instrumentation

Participants were required to complete a music questionnaire, demographic information form, and two assessment scales. The music questionnaire required participants to identify music preferences and total weekly listening time. Music preferences were coded according to Billboard Music categories, which will include: R&B/Hip Hop, Rap, Modern/Mainstream Rock, Dance, Christian, Adult Contemporary, and Country. Preferences were based on responses given by participants regarding whether they listen "never," "sometimes," "most of the time," or "all the time". Frequency of total participant responses in addition to individual group responses was as follows:

Table 1

Total Music Preference Response Frequency

Responses (n=208)	RB	Rap	Rock	Country	Adult	Dance	Christian
Never	25	40	23	87	75	170	163
Sometimes	90	83	94	70	92	32	30
Most of the Time	42	39	53	31	30	6	9
All of the Time	51	46	38	20	11	0	6

Table 2 *Undergraduate Music Preference Response Frequency* 

Responses (n=112)	RB	Rap	Rock	Country	Adult	Dance	Christian
Never	14	22	10	25	23	88	79
Sometimes	53	55	53	41	54	22	22
Most of the Time	24	21	34	28	25	2	9

All of the Time	21	14	15	18	10	0
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Table 3

Adolescent Music Preference Response Frequency

Responses (n=96)	RB	Rap	Rock	Country	Adult	Dance	Christian
NI	11	10	1.2	<i>(</i> 2	<i>5</i> 2	02	0.4
Never	11	18	13	62	52	82	84
Sometimes	37	28	41	29	38	10	8
Most of the Time	18	18	19	3	5	4	0
All of the Time	30	32	23	2	1	0	4

#### Music Violence Assessment

The Music Violence Assessment (MVA) was an assessment tool created in order to measure an individual's attitudes and behaviors toward music violence. The MVA contained 12 questions, which were divided by behavioral and attitudinal sections. Questions 1 through 6 represented behavioral questions and questions 7 through 12 represented attitudinal questions. The use of reverse coding was employed for questions 2, 6, 10, and 12. Scoring for the MVA was anchored using likert type scores, which ranged from 1 to 7. The direction of response choices ranged from disagree strongly, disagree moderately, disagree a little, neither agree nor disagree, agree a little, agree moderately, and agree strongly. Higher scores on this assessment tool illustrate more violent behaviors and attitudes with respect to music. SPSS software was utilized in order to determine the reliability coefficient of the MVA through Chronbach's Alpha. The reliability coefficient of the MVA was shown to be sound and produced coefficients of .73 or higher (n=208).

# Normative Beliefs About Aggression

The Normative Beliefs about Aggression measure (NOBAG) developed by Huesmann was used for this study (Huesmann, & Guerra, 1997; Huesmann, Guerra, Zelli & Miller, 1992).

The scale is a 20-item self-report and measures a child, adolescent, or young adult's perception of how acceptable it is to behave aggressively, both under varying conditions of provocation and when no conditions are specified. The assessment can be administered individually or in groups and respondents are asked to select the one choice that best describes their own ideas or experience.

Additionally the assessment contains three subscales which include the General Approval Aggression scale that measures the overall endorsement of aggressive responses, the Approval of Retaliation Aggression, which measures beliefs about the appropriateness of aggressive responses to provocation, and the Total Approval of Aggression scale which averages responses to all 20-items. All sections and subscales are scored using a 4-point scale and have an internal consistency of .90 and a one-year stability of .39. Furthermore, the scale possessed the demographic information sheet, which gathered information pertaining to the participant, including age, ethnicity, and gender.

#### Procedure

The present study was a cross-sectional study, which attempted to identify the relationship between musical preferences and beliefs toward aggression and the relationship between behaviors and attitudes held toward violent music. Data were collected from two sample groups through the utilization of questionnaires and assessment tools. An experimenter unfamiliar to the participants administered measures and the classroom instructor was in the room at the time of administration. The study was conducted during an ordinary school day and lasted for no more than 35 minutes. Participants were initially provided with proper writing utensils and the music questionnaire form and were instructed to complete the form within a 10-minute period. Upon completion, participants were then given the MVA and NOBAG and had a

maximum of 20 minutes to complete the assessments. The last 5 minutes allotted were used in order for the experimenter to answer any questions and collect forms.

#### Results

# Reliability of Scales

To evaluate the reliability of scales a reliability coefficient (alpha) was calculated for all scales and subscales used in the analysis. The reliability coefficients for all scales and subscales used in the present study were .73 or higher demonstrating that their reliability was sound. The only exception was for the behavioral subscale of the Attitudes toward Music Violence (MVA) scale where a reliability coefficient of  $\alpha$  = .54 was found for the adolescent subgroup. An item analysis was conducted on the behavioral subscale but failed to identify any means of increasing the reliability of the subscale, therefore caution should be used in interpretation.

# Correlational Analysis of Music Preference and MVA

In general, preference scores for Rap, RB, & Rock music were positively related to MVA scores. MVA scores were positively related to preference for Rap music (r(208) = .42, p<.001) with both attitudinal (r=.32, p<.001) and behavioral portions of the assessment (r=.46, p<.001) showing significant correlations. The RB music preference was also found to be positively correlated with total scores on the MVA (r(208) = .19, p=.007) with the behavioral component showing a significant correlation (r(208) = .24, p<.001). However, the correlation between the attitudinal component of the MVA scale and RB music preference (r(208) = .11, p=.1), although positive, failed to reach significance. Correlations between preferences for Rock music and MVA, although positive, failed to reach significance using total MVA scores (r(208) = .07, p=.31, the attitude subscale scores (r(208) = .10, p=.15, or behavioral subscale scores (r(208) = .03, p=.72).

In general, preference scores for Country, Adult, Dance, and Christian music were found to have negative correlations with the MVA scale. Preferences for Country music were negatively correlated with the MVA (r(208) = -.35, p < .001) with both the attitudinal (r(208) = -.337, p < .001) and behavioral subscales (r(208) = -.30, p < .001) showing significant correlations. Preferences for Adult music were negatively correlated with the MVA (r(208) = -.25, p < .001) with both the attitudinal (r(208) = -.23, p < .001) and behavioral subscales (r(208) = -.22, p < .001) showing significant correlations. Preferences for Dance music were negatively correlated, although marginally) with the MVA (r(208) = -.13, p = .07) with both the attitudinal (r(208) = -.12, p = .08) and behavioral subscales (r(208) = -.11, p = .12). showing weak negative correlations. Lastly, preferences for Christian music were negatively correlated with the MVA (r(208) = -.255, p < .001) with both the attitudinal (r(208) = -.24, p < .001) and behavioral subscales (r(208) = -.255, p < .001) with both the attitudinal (r(208) = -.24, p < .001) and behavioral subscales (r(208) = -.23, p < .001) showing significant correlations.

Correlational Analysis of Music Preference and Normative Beliefs About Aggression

Musical preferences were also predicted to correlate with acceptance of violence in a consistent manner with how they related to the musical violence measures. In support of this, Musical preference scores for Rap, RB, and Rock were found to be positively related with NOBAG scores. The correlations between musical preferences and beliefs pertaining to aggression scores are presented in Table 8. Tables 9 and 10 illustrate these same correlations within the specific sample groups. As expected, preferences for Rap music were positively correlated with the General Approval subscale of the NBA (r(208) = .23, p<.001), the Retaliation Subscale (r(208) = .29, p<.001), and the Total Approval of Aggression Subscale (r(208) = .30, p<.001). RB musical preferences were not found to be correlated with General Approval Subscale (r(208) = .02) RB musical preferences were related to Retaliation Subscale scores

(r(208) = .17, p = .016) and marginally related to Total Approval scale scores (r(208) = .12, p = .09). Preferences for Rock music preference were found to be positively related with the General Approval Subscales (r(208) = .15, p = .027) and the Total Approval scale (r(208) = .14, p = .04). The correlation with the Retaliation Approval subscale, although positive, failed to reach significance, (r(208) = .105, p = .13).

In general, preference scores for Country, Adult, and Christian music were found to be negatively related to NOBAG scores. Preferences for Country music was found to be negatively related to scores on the General (r(208) = -.25, p < .001), Retaliation (r(208) = -.15, p = .032), and Total Approval scales (r(208) = -.21, p = .002) of the NOBAG. Preferences for Adult music were found to be negatively related (marginally) to the General (r(208) = -.13, p = .06), Retaliation (r(208) = -.12, p = .076), and Total Approval scales (r(208) = -.14, p = .04). Preferences for Christian music were found to be negatively related to the General (r(208) = -.15, p = .02), Retaliation (r(208) = -.16, p = .02), and Total Approval scales (r(208) = .17, p = .01). Preferences for Dance music, however, were found to be unrelated (although consistently negative) to the General (r(208) = -.04, p = .53), Retaliation (r(208) = -.04, p = .54), and Total Approval scales (r(208) = -.05, p = .48).

Table 5

Correlations between Participant Musical Preference and MVA Correlations (Total Sample)

Preference n		Overall MVA	MVA Attitudinal	MVA Behavioral
RB	208	.19**	.11	.24**
RAP	208	.42 **	.32**	.46**
ROCK	208	.07	.10	.03
COUNTRY	208	35**	34**	30**

ADULT	208	25**	23**	22**
DANCE	208	13	12	11
CHRISTIAN	208	26**	24**	23**

Table 6 Correlations between Participant Musical Preference and MVA Scores (Undergraduate Sample)

Preference	n	Overall MVA	MVA Attitudinal	MVA Behavioral
RB	112	.13	.00	.22*
RAP	112	.47**	.35**	.50**
ROCK	112	.02	.06	02
COUNTRY	112	34**	32**	30**
ADULT	112	20*	20*	17
DANCE	112	13	21*	04
CHRISTIAN	112	33**	28**	32**

Table 7 Correlations between Participant Musical Preference and MVA Scores (Adolescent Sample)

Preference	n	Overall MVA	MVA Attitudinal	MVA Behavioral
RB	96	.18	.11	.22*
RAP	96	.29	.18**	.36 **
ROCK	96	.10	.12	.05
COUNTRY	96	.17	.11	.19

<sup>\*\*</sup> p< 0.01 level \* p< 0.05 level

<sup>\*\*</sup> p< 0.01 level \* p< 0.05 level

ADULT	96	.15	.16	.10
DANCE	96	10	03	17
CHRISTIAN	96	07	11	02

<sup>\*\*</sup> *p*< 0.01 level

Correlational Analysis of MVA and Normative Beliefs about Aggression

Consistent with the general hypotheses, the relationship between scores on the MVA scales and NOBAG scales were found to be positively correlated. Overall, the MVA illustrated a positive relationship with the General (r(208) = .55, p<.001), Retaliation (r(208) = .42, p<.001), and Total Approval (r(208) = .53, p<.001). This pattern of relationship was found for both the adolescent and undergraduate samples. The correlations between MVA and NOBAG appeared to be stronger for the adolescent sample, however, a set of Fisher Z-tests failed to find any significant differences between the correlations.

 Table 8

 Correlations Between Total Participant Musical Preference and NOBAG Scores

n	General Approval	Retaliation Approval	Total Approval
208	.02	.17*	.12
208	.26**	.29**	.30**
208	.15*	.11	.14*
208	25**	15*	21**
208	13	12*	14
208	04	04	05
208	15*	16*	18*
	208 208 208 208 208 208	208 .02 208 .26** 208 .15* 20825** 20813 20804	208       .02       .17*         208       .26**       .29**         208       .15*       .11         208      25**      15*         208      13      12*         208      04      04

<sup>\*</sup> *p*< 0.05 level

### Undergraduate and Adolescent Comparisons

Table 12 illustrates the means and standard deviations for MVA and NOBAG scores for the undergraduate and adolescent samples. As can be seen in this table, all scale scores for the adolescent sample exceeded those of undergraduate sample. Interestingly, adolescents reported a less negative attitude toward violent music, t(206) = 8.2, p < .001 and they reported that they listened to more violent music, t(206) = 6.2, p < .001. In addition, they also reported that they were more accepting of general violence, t(206) = 6.7, p < .001 and more accepting of violence retaliation, t(206) = 5.0, p < .001. One may argue that these differences may have been due to differences in demographics between the samples, however, after controlling for both sex and race differences, these differences remained large.

Undergraduate and Adolescents Comparisons of MVA and NOBAG scores

Undergraduate Mean

Adolescent Mean

U	Indergraduate Me	luate Mean Adolescent Mean			
Source	(n=112)	SD	(n=96)	SD	p
MVA					
Behavioral	3.50	1.20	4.44	.96	p<.001*
Attitudinal	2.47	1.07	3.82	1.33	p<.001*
Total	2.98	1.04	4.13	1.02	<i>p</i> <.001*
NBA					
General Approv	al 1.48	.45	1.98	.62	<i>p</i> <.001*
Retaliation Appr	roval 2.17	.52	2.53	.52	<i>p</i> <.001*
Total Approval	1.90	.43	2.31	.48	<i>p</i> <.001*

<sup>\*\*</sup> *p*< 0.01 level

<sup>\*</sup> p < 0.05 level

Undergraduate (*n*=112) Adolescent (*n*=96)

### Sex & Race Differences

Table 13 illustrates the means and standard deviations for MVA and NOBAG scores for female and male participants. As can be seen in this table, the majority of scale scores for the male participants exceed those of the female participants. Male participants reported a less negative attitude toward violent music, t(206) = 4.7, p < .001 and they reported that they listened to more violent music, t(206) = 2.9, p < .001. Furthermore, males also reported that they were more accepting of general aggression, t(206) = 3.8, p < .001 and more accepting of total aggression, t(206) = 2.9, p < .005. Interestingly, a level of significance was not met between males and females and their acceptance of retaliation, t(206) = 1.7, p = .10

Table 13

Gender: Comparisons of MVA and NOBAG scores

1	Female Mean		Male Mean		
Source	(n=136)	SD	(n=72)	SD	p
MVA					
Behavioral	3.76	1.20	4.25	1.12	p<.001*
Attitudinal	2.78	1.30	3.69	1.32	p<.001*
Total	3.27	1.15	3.96	1.11	p<.001*
NBA					
General Approval	1.60	.59	1.91	.54	p<.001*
Retaliation Approval	2.30	.56	2.42	.51	p=.095
Total Approval	2.02	.51	2.22	.45	p<.001*

Females (*n*=136)

Males (n=72)

Table 14 illustrates the means and standard deviations for MVA and NOBAG scores for Hispanic and White participants. As can be seen in this table, all scale scores for Hispanic participants exceed those of white participants. Hispanics reported a less negative attitude toward violent music, t(193) = 3.0, p < .005 and they reported that they listened to more violent music, t(193) = 3.2, p < .001. In addition, they also reported that they were more accepting of general violence, t(193) = 3.9, p < .001 and more accepting of violence retaliation, t(193) = 4.7, p < .001.

Table 14

Race: Comparison of MVA and NOBAG Scores

Source	Caucasian M	lean	Hispanic Mean (n=136)	SD	p
	(n=59)	SD			
MVA					
Behavioral	3.50	1.36	4.12	1.12	p<.001*
Attitudinal	2.67	1.30	3.31	1.32	<i>p</i> <.001*
Total	3.10	1.25	3.72	1.11	<i>p</i> <.001*
NBA					
General Approval	1.50	.46	1.80	.61	p<.001*
Retaliation Approval	2.10	.51	2.46	.53	p<.001*
Total Approval	1.85	.44	2.20	.50	<i>p</i> <.001*

Caucasian (n=59)

Hispanic (n=136)

### **Discussion**

Previous research with respect to music violence and its adverse effects on individuals was supported in this study (e.g., Anderson, Carnagey, & Eubanks, 2003; Johnson, Adams, Ashburn, & Reed, 2003; Johnson, Jackson, & Gatto, 1995, etc). The present study illustrated the

positive associations between Rap, RB, and Rock music and beliefs toward violence. These findings support the prediction of the study, which suggested that Rap, RB, and Rock music would be related to less negative views toward violence and more consumption of violent music. These genres of music have traditionally supported and contained more acceptance of aggression and their positive relationship with behaviors, attitudes, and beliefs toward violence have been illustrated.

Furthermore, the present study has illustrated negative correlations between, Country, Dance, Adult, and Christian music, which have not been conceptualized as aggressive. These findings support the study's hypothesis that the music genres of Country, Dance, Adult, and Christian would be less accepting toward violence and the utilization of music violence.

These findings suggest that Rap, RB, and Rock promote and convey messages of aggression to the individuals that are listening to these genres. Individuals that identify these preferences are listening to more violent music and possess less negative attitudes toward violence. Additionally, these individuals are also accepting of aggression and aggression as a form of retaliation. The illustration of these relationships between violent music and its adverse effects supports the theoretical models of explanation, which emphasize the role of learning within the socialization processes of individuals. As the models posit, individuals utilize tools such as imitation, modeling, and scripting to form associations for interpersonal functioning. These individuals then internalize these forms of learning and create a network of behaviors, attitudes, and beliefs that interact with their environment.

Furthermore, the present study also illustrates the differences between age and sex with respect to aggression. These findings support the study's hypothesis that adolescents will be more prone to endorse aggression oppose to younger adults. The study found that adolescents

consistently report a less negative attitude toward aggression and listened to more violent music.

Additionally adolescents reported a higher rate of acceptance toward aggression. These findings further support the role age plays in the observational learning of behavior.

Moreover, the study also found significant differences between its female and male participants. Again, this finding supports the study's prediction that female participants will be less accepting of violence than the male participants. The male participant score consistent exceeded those of female participants and these findings are indicative of certain gender moderator effects.

Overall the study's findings strengthen the preexisting realm of empirical evidence that supports the adverse effects of media violence. The study provides an illustration through its findings that statistically demonstrate a positive relationship between violent music and aggressive behaviors, beliefs, and attitudes. The study also illustrates significant group differences that have recently not been studied in regards to music violence. The cross-sectional framework supports the moderator effects theorized as contributing to the internalization of aggressive learning.

### Summary

The present study has found that music preference is related to attitudes toward violence, the consumption of violent music, and the endorsement of aggression. Rap, RB, and Rock music preferences have been shown to be strongly related to these areas of aggression, whereas Country, Dance, Adults, and Christian preferences have been shown to be negatively related. These findings suggest that the effects of violent music are not short lived, but actually affect an individual's behaviors, attitudes, and beliefs. These finding suggest that violent music conveys

messages about violence which in turn affects an individual's thoughts and perceptions of violence.

Furthermore the study has found significant differences between groups with respect to age and gender. These differences suggest that adolescents are more predisposed to endorse and adopt more aggressive tendencies, which supports theoretical models that emphasize the role of early socialization processes. Younger individuals in this study consistently scored higher than undergraduate participants and held less negative views toward aggression, listened to more violent music, and were more accepting of aggression. Differences found with respect to gender suggest that traditional cultural roles of females reinforce less aggressive means of behavior and endorsement of violence.

Overall the study has provided a valuable insight into an area of media violence research that has not been conducted. Previous work within the field of music violence has been limited to randomized experiments and has not been viewed within a cross-sectional framework. The present study illustrates the differences between adolescents and undergraduates in addition to males and females. The implications for these findings provide an opportunity to identify certain trends in-group characteristics and draw inferences about these differences.

#### Limitations

The generalizations made by the present study should be viewed within the context of the sampling population. In particular, there were more female participants and results should be viewed within this gender-constrained context. The undergraduate participants were chosen out of convenience for sampling purposes and consideration should be given to their level of education. Additional consideration should be given to the issue that these participants are not representative of the general population and only are only representative of a small proportion of

college undergraduates. Furthermore, these undergraduates only represented a small number of academic disciplines and data was obtained only from day-based courses. Possible preference and responses might differ by college major.

Another limitation within the study was the adolescent sampling issue. Only one school was chosen for this study and it was also a public school. The participants from this sample may only represent one of many schools in the area and responses might have been different from other locations. In addition, certain consideration should be given to the issue of race. The majority of adolescents were Hispanic and there were significant differences between their responses and that of white adolescents. However, it should be noted that this was not accounted for in the literature review and a more representative sample of race should be utilized in order to make generalizations.

Lastly, the limitation of causality should be considered. The present study was designed to be cross-sectional and correlational. Although strong statistical evidence has been illustrated in the study, it does not imply causality. It does however demonstrate a relationship between these variables and supports previous research in the field. Consequently, caution should be used when discussing the implications of the findings and be viewed within a correlation-based viewpoint. Furthermore it should be noted in regards to causality that individuals whom report less negative attitudes toward violence, listen to more violent music, and consume more violent music could possibly possess these characteristics inherently and therefore seek out violent music.

#### Future Directions

The present study has provided the opportunity to illustrate and expand upon the empirical work with violence in music and its effect on listeners. In particular the present study

has demonstrated that certain musical genres, traditionally conceptualized as violent, are associated with less negative views toward aggression, lead to more consumption of violent music, and create more accepting beliefs toward aggression. The future of media violence and its impact on consumers would benefit from continual studies that incorporated several violent media outlets and observed the relationship between these mediums and their effect on consumers.

Specifically, violent music should be viewed in association with violent television in order to identify a possible relationship between these two popular outlets. Previous work within the field has either concentrated on music or television, but has failed to give attention to the interaction between them. Furthermore, future research may possibly gain statistical strength from the utilization of true experiments in conjunction with correlational analysis in order to identify not only relationships, but also identify causality of music and television violence. The implications that might possibly be made from such empirical methods may lead to the identification of moderator effects shared between the media outlets and observable statistical trends between independent variables.

Finally, future research within the area of music violence and its effects on individuals should concentrate efforts toward sampling a larger number of individuals. The larger sample size should also account for race and gender representations in conjunction with education and socioeconomic status. The interaction of these variables might also contribute to the effect and consumption of music violence and factors should be identified when studying these variables and populations. Furthermore, the identification of musical genre preference in association with these group characteristics may provide an illustration of group preference and possibly infer inequalities between group representations.

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